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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/868,752	09/04/2001	Mark Stewart Nichols	05222.00165	6533

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EXAMINER

BELL, MELTIN

ART UNIT	PAPER NUMBER
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2121

DATE MAILED: 04/08/2004

8

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/868,752

Applicant(s)

NICHOLS, MARK STEWART

Examiner

Meltin Bell

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 September 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☒ Claim(s) 3-4, 8, 10, 12-13, 17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 9/4/01 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☒ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 7/2-7-02.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

This action is responsive to application **09/868,752** filed 09/4/01.

Claims 1-18 have been examined.

Priority

Acknowledgment is made of applicant's claim for priority based on application 09/221,217 filed in the United States on **12/22/98**.

Information Disclosure Statement

Applicant is respectfully reminded of the ongoing Duty to disclose 37 C.F.R. 1.56 all pertinent information and material pertaining to the patentability of applicant's claimed invention, by submitting in a timely manner PTO-1449, Information Disclosure Statement (IDS) with the filing of applicant's application or thereafter.

The information disclosure statement filed 2/7/02 fails to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because of missing or inaccurate information in the listing:

- Many references are missing the date of publication. Examples include
 - "Evaluating the effectiveness of feedback in SQL-tutor"
 - "Automated Training of Legal Reasoning" and related web page
 - "CAPTOR a model for delivering web based intelligent tutoring system technology"

- o "KBLPS Overview" and related web page
- o "Practical methods for automatically generating typed links"
- o "Teaching Real-World Analysis Skills for Goal Based Scenario".

It has been placed in the application file. Applicant is advised that the date of any re-submission of any item of information contained in this information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609 ¶ C(1).

Drawings

The drawings have not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is required in correcting any errors of which applicant may become aware in the drawings.

The drawings are objected to because:

- Fig. 2 is missing item 234, the mathematical modeling tool of page 4, line 9.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is required in correcting any errors of which applicant may become aware in the specification.

The disclosure is objected to because of the following informalities:

- Figure 2, item 230 System Dynamics Engine is referred to as set of messages on page 4, line 2 and Solution Construction Aid (SCA) on page 4, line 9.
- Figure 2, item 250 System Dynamics Model (PowerSim) is referred to as knowledge system on page 4, line 10.
- Figure 2, item 270 Intelligent Coaching Agent (C++) is referred to as software tutor on page 4, line 12.
- Figure 2, item 240 Simulation Engine is referred to as artificial intelligence engine on page 4, line 12.
- Figure 2, item 242 Deliver Feedback is referred to as client cultural messages on page 4, line 14.
- Figure 2, item 238 Inputs Outputs is referred to as drag and drop association of information on page 4, lines 17-18.

Appropriate correction is required.

Claim Objections

Claim 3-4, 8, 10, 12-13 and 17 are objected to because of the following informalities:

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Regarding claim 3:

- 'a presentation' would read better as 'the presentation'.

Regarding claim 4:

- 'a presentation' would read better as 'the presentation'.

Regarding claim 8:

- 'a presentation' would read better as 'the presentation'.

Regarding claim 10:

- limitations of the claim are ordered (b) through (a) instead of (a) through (e).

Regarding claim 12:

- 'a presentation' would read better as 'the presentation'.

Regarding claim 13:

- 'a presentation' would read better as 'the presentation'.

Regarding claim 17:

- 'a presentation' would read better as 'the presentation'.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 1 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The language of the claim (e.g. "goal", "presentation", "specific requirements") raises a question as to whether the claim is

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directed merely to an abstract idea that is not tied to a technological art, environment or machine which would result in a practical application producing a concrete, useful, and tangible result to form the basis of statutory subject matter under 35 U.S.C. 101. If claim 1 was amended to recite a computer-implemented method, it will be statutory in most cases since use of technology permits the function of the descriptive material to be realized.

Claim Rejections - 35 USC § 102

To expedite a complete examination of the instant application, the claims rejected under 35 U.S.C. 101 (nonstatutory) above are further rejected as set forth below in anticipation of applicant amending these claims to place them within the four statutory categories of invention.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3-4, 9-10, 12-13 and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by *Goleh* U.S. Patent Number 5,372,507 (December 13, 1994).

Claims 2, 5-8, 11 and 15-17 are rejected under 35 U.S.C. 102(b) as being anticipated by *Cook et al* W.I.P.O. International Publication Number WO 97/44766 A1 (November 27, 1997).

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Regarding claim 1:

Goleh teaches,

- (a) receiving information indicative of a goal (Abstract, sentence 2, "The student is... a stated goal")
- (b) integrating information that motivates accomplishment of the goal for use in the presentation (Abstract, sentences 3-5, "Attaining the goal... comprising the subject"; column 1, lines 21-29, "upon facing a... to on-the-job training")
- (c) evaluating progress toward the goal and providing feedback that further motivates accomplishment of the goal (column 4, lines 65-67, "The monitor 14... matter at hand"; column 9, lines 22-32, "The tutorial then... for the student"; column 11, lines 1-12, "During this portion... the correct amounts")
- (d) managing the presentation of information around specific requirements designed to achieve the goal (Fig. 3a, items 406, 412, 416, 420)

Regarding claim 2:

Cook et al teaches,

- (a) receiving information indicative of a goal (Figs. 4, 10A-B, 11)
- (b) integrating information that motivates accomplishment of the goal for use in the presentation (page 8, lines 1-15, "it accepts data... appropriate candidate behaviors")
- (c) evaluating progress toward the goal and providing feedback that further motivates accomplishment of the goal (page 10, lines 24-31, "A further important... student's pedagogic characteristics")

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- (d) managing the presentation of information around specific requirements designed to achieve the goal (page 11, lines 32-36, "In an embodiment... mixed scheduling initiative")
- the requirements include direct linkages to remedial education presentations (page 20, lines 10-12, "in case of... or remediation materials"; page 86, Table 2B)

Regarding claim 3:

The rejection of claim 1 is incorporated. Therefore, claim 3 is rejected under the same rationale as claim 1.

Regarding claim 4:

The rejection of claim 1 is incorporated. Therefore, claim 4 is rejected under the same rationale as claim 1.

Regarding claim 5:

Cook et al teaches,

- (a) receiving information indicative of a goal (Figs. 4, 10A-B, 11)
- (b) integrating information that motivates accomplishment of the goal for use in the presentation (page 8, lines 1-15, "it accepts data... appropriate candidate behaviors")
- (c) evaluating progress toward the goal and providing feedback that further motivates accomplishment of the goal (page 10, lines 24-31, "A further important... student's pedagogic characteristics")
- (d) managing the presentation of information around specific requirements designed to achieve the goal (page 11, lines 32-36, "In an embodiment... mixed scheduling initiative")

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- the step of providing feedback that identifies a navigation path for a student based on the goal (page 69, lines 23-35, "the designer defines...of retry outcome")

Regarding claim 6:

Cook et al teaches,

- (a) receiving information indicative of a goal (Figs. 4, 10A-B, 11)
- (b) integrating information that motivates accomplishment of the goal for use in the presentation (page 8, lines 1-15, "it accepts data... appropriate candidate behaviors")
- (c) evaluating progress toward the goal and providing feedback that further motivates accomplishment of the goal (page 10, lines 24-31, "A further important... student's pedagogic characteristics")
- (d) managing the presentation of information around specific requirements designed to achieve the goal (page 11, lines 32-36, "In an embodiment... mixed scheduling initiative")
- the step of utilizing a student identifier to control access to appropriate presentation material (page 32, lines 33-37, "The executive software...for this student")

Regarding claim 7:

Cook et al teaches,

- (a) receiving information indicative of a goal (Figs. 4, 10A-B, 11)
- (b) integrating information that motivates accomplishment of the goal for use in the presentation (page 8, lines 1-15, "it accepts data... appropriate candidate behaviors")

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- (c) evaluating progress toward the goal and providing feedback that further motivates accomplishment of the goal (page 10, lines 24-31, "A further important... student's pedagogic characteristics")
- (d) managing the presentation of information around specific requirements designed to achieve the goal (page 11, lines 32-36, "In an embodiment... mixed scheduling initiative")
- each item in the presentation is assigned an identifier to provide a level of granularity for restrictive access to presentation material (page 48, lines 28-33, "To facilitate metering... elements is metered")

Regarding claim 8:

Cook et al teaches,

- (a) receiving information indicative of a goal (Figs. 4, 10A-B, 11)
- (b) integrating information that motivates accomplishment of the goal for use in the presentation (page 8, lines 1-15, "it accepts data... appropriate candidate behaviors")
- (c) evaluating progress toward the goal and providing feedback that further motivates accomplishment of the goal (page 10, lines 24-31, "A further important... student's pedagogic characteristics")
- (d) managing the presentation of information around specific requirements designed to achieve the goal (page 11, lines 32-36, "In an embodiment... mixed scheduling initiative")
- each activity associated with a presentation is identified to provide a level of granularity for restrictive access to the activity (page 35, lines 2-10, "before allowing

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downloaded ... common server systems"; page 46, lines 1-12, "If they do... caught and rejected"; page 90, lines 11-35, "this data includes... by the student"; page 102, lines 14-37, "The student data... occurring too frequently")

Regarding claim 9:

Goleh teaches,

- (a) receiving information indicative of a goal (Abstract, sentence 2, "The student is... a stated goal")
- (b) integrating information that motivates accomplishment of the goal for use in the presentation (Abstract, sentences 3-5, "Attaining the goal... comprising the subject"; column 1, lines 21-29, "upon facing a... to on-the-job training")
- (c) evaluating progress toward the goal and providing feedback that further motivates accomplishment of the goal (column 4, lines 65-67, "The monitor 14... matter at hand"; column 9, lines 22-32, "The tutorial then... for the student"; column 11, lines 1-12, "During this portion... the correct amounts")
- (d) managing the presentation of information around specific requirements designed to achieve the goal (Fig. 3a, items 406, 412, 416, 420)
- the step of storing a current location for one or more students that tracks the one or more students progress in the presentation (column 3, lines 25-51, "The present invention... available historical references")

Regarding claim 10:

Goleh teaches,

- (b) a processor (Fig. 1, item 10)

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- (c) a memory that stores information under the control of the processor (Abstract, sentence 2, "The student is... a stated goal"; Abstract, sentence 6, "The student is... the exited step")
- (d) logic that integrates information that motivates accomplishment of the goal for use in the presentation (Abstract, sentences 3-5, "Attaining the goal... comprising the subject"; column 1, lines 21-29, "upon facing a... to on-the-job training")
- (e) logic that evaluates progress toward the goal and providing feedback that further motivates accomplishment of the goal (column 4, lines 65-67, "The monitor 14... matter at hand"; column 9, lines 22-32, "The tutorial then... for the student"; column 11, lines 1-12, "During this portion... the correct amounts")
- (a) logic that manages the presentation of information around specific requirements designed to achieve the goal (Fig. 3a, items 406, 412, 416, 420)

Regarding claim 11:

Cook et al teaches,

- (b) a processor (page 29, lines 20-22, "A NC is... or the Internet")
- (c) a memory that stores information under the control of the processor (page 29, lines 15-17, "student client system... a backing store")
- (d) logic that integrates information that motivates accomplishment of the goal for use in the presentation (page 8, lines 1-15, "it accepts data... appropriate candidate behaviors"; Figs. 4, 10A-B, 11)

- (e) logic that evaluates progress toward the goal and providing feedback that further motivates accomplishment of the goal (page 10, lines 24-31, "A further important... student's pedagogic characteristics")
- (a) logic that manages the presentation of information around specific requirements designed to achieve the goal (page 11, lines 32-36, "In an embodiment... mixed scheduling initiative")
- the requirements include direct linkages to remedial education presentations (page 20, lines 10-12, "in case of... or remediation materials" ; page 86, Table 2B)

Regarding claim 12:

The rejection of claim 10 is incorporated. Therefore, claim 12 is rejected under the same rationale as claim 10.

Regarding claim 13:

The rejection of claim 10 is incorporated. Therefore, claim 13 is rejected under the same rationale as claim 10.

Regarding claim 14:

Cook et al teaches,

- (b) a processor (page 29, lines 20-22, "A NC is... or the Internet")
- (c) a memory that stores information under the control of the processor (page 29, lines 15-17, "student client system... a backing store")
- (d) logic that integrates information that motivates accomplishment of the goal for use in the presentation (page 8, lines 1-15, "it accepts data... appropriate candidate behaviors"; Figs. 4, 10A-B, 11)

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- (e) logic that evaluates progress toward the goal and providing feedback that further motivates accomplishment of the goal (page 10, lines 24-31, "A further important... student's pedagogic characteristics")
- (a) logic that manages the presentation of information around specific requirements designed to achieve the goal (page 11, lines 32-36, "In an embodiment... mixed scheduling initiative")
- logic that provides feedback that identifies a navigation path for a student based on the goal (page 69, lines 23-35, "the designer defines... of retry outcome")

Regarding claim 15:

Cook et al teaches,

- (b) a processor (page 29, lines 20-22, "A NC is... or the Internet")
- (c) a memory that stores information under the control of the processor (page 29, lines 15-17, "student client system... a backing store")
- (d) logic that integrates information that motivates accomplishment of the goal for use in the presentation (page 8, lines 1-15, "it accepts data... appropriate candidate behaviors"; Figs. 4, 10A-B, 11)
- (e) logic that evaluates progress toward the goal and providing feedback that further motivates accomplishment of the goal (page 10, lines 24-31, "A further important... student's pedagogic characteristics")
- (a) logic that manages the presentation of information around specific requirements designed to achieve the goal (page 11, lines 32-36, "In an embodiment... mixed scheduling initiative")

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- logic that utilizes a student identifier to control access to appropriate presentation material (page 32, lines 33-37, "The executive software...for this student")

Regarding claim 16:

Cook et al teaches,

- (b) a processor (page 29, lines 20-22, "A NC is...or the Internet")
- (c) a memory that stores information under the control of the processor (page 29, lines 15-17, "student client system...a backing store")
- (d) logic that integrates information that motivates accomplishment of the goal for use in the presentation (page 8, lines 1-15, "it accepts data...appropriate candidate behaviors"; Figs. 4, 10A-B, 11)
- (e) logic that evaluates progress toward the goal and providing feedback that further motivates accomplishment of the goal (page 10, lines 24-31, "A further important...student's pedagogic characteristics")
- (a) logic that manages the presentation of information around specific requirements designed to achieve the goal (page 11, lines 32-36, "In an embodiment...mixed scheduling initiative")
- each item in the presentation is assigned an identifier to provide a level of granularity for restrictive access to presentation material (page 48, lines 28-33, "To facilitate metering...elements is metered")
- logic that utilizes a student identifier to control access to appropriate presentation material (page 32, lines 33-37, "The executive software...for this student")

Regarding claim 17:

Cook et al teaches,

- (b) a processor (page 29, lines 20-22, "A NC is... or the Internet")
- (c) a memory that stores information under the control of the processor (page 29, lines 15-17, "student client system... a backing store")
- (d) logic that integrates information that motivates accomplishment of the goal for use in the presentation (page 8, lines 1-15, "it accepts data... appropriate candidate behaviors"; Figs. 4, 10A-B, 11)
- (e) logic that evaluates progress toward the goal and providing feedback that further motivates accomplishment of the goal (page 10, lines 24-31, "A further important... student's pedagogic characteristics")
- (a) logic that manages the presentation of information around specific requirements designed to achieve the goal (page 11, lines 32-36, "In an embodiment... mixed scheduling initiative")
- each activity associated with a presentation is identified to provide a level of granularity for restrictive access to the activity (page 35, lines 2-10, "before allowing downloaded ... common server systems"; page 46, lines 1-12, "If they do... caught and rejected"; page 90, lines 11-35, "this data includes... by the student"; page 102, lines 14-37, "The student data... occurring too frequently")

Regarding claim 18:

Goleh teaches,

- (b) a processor (Fig. 1, item 10)

- (c) a memory that stores information under the control of the processor (Abstract, sentence 2, "The student is... a stated goal"; Abstract, sentence 6, "The student is... the exited step")
- (d) logic that integrates information that motivates accomplishment of the goal for use in the presentation (Abstract, sentences 3-5, "Attaining the goal... comprising the subject"; column 1, lines 21-29, "upon facing a... to on-the-job training")
- (e) logic that evaluates progress toward the goal and providing feedback that further motivates accomplishment of the goal (column 4, lines 65-67, "The monitor 14... matter at hand"; column 9, lines 22-32, "The tutorial then... for the student"; column 11, lines 1-12, "During this portion... the correct amounts")
- (a) logic that manages the presentation of information around specific requirements designed to achieve the goal (Fig. 3a, items 406, 412, 416, 420)
- logic that stores a current location for one or more students that tracks the one or more students progress in the presentation (column 3, lines 25-51, "The present invention... available historical references")

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- *Goleh*; U.S. Patent Number 5,372,507
- *Cook et al*; W.I.P.O. Int'l. Pub. Num. WO 97/44766 A1

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- *Nichols*; USPN 6,023,692; Goal Based Tutoring System with Behavior to Control Flow of Presentation

- *Hayes et al*; USPN 5,170,464 ; Method for Rolling Back an Expert System

- *Miyashita*; U.S. Patent Number 5,301,260; Inference Processor Using Data

Consistency Holder

- *Corella et al*; U.S. Patent Number 5,835,683; System and Method for Authoring an Expert System

- *Kung*; U.S. Patent Number 5,295,230; Knowledge Representation for Expert System

- *Freiling et al*; U.S. Patent Number 4,816,994; Rule Acquisition for Expert System

- *Kershaw et al*; U.S. Patent Number 5,827,070; System and Methods for Computer Based Testing

- *De Lange*; W.I.P.O. Int'l. Pub. Num. WO 98/32109 A1

- *Zeller et al* ; DDD—a free graphical front-end for UNIX debuggers; ACM SIGPLAN Notices; January 1996; Vol. 31, Iss. 1

- *Simonini*; PCT/US99/02717 International Preliminary Examination Report; 24/07/2000 demand submission date, 23.03.2001 report completion date

Any inquiry concerning this communication or earlier communications from the Office should be directed to Melvin Bell whose telephone number is 703-305-0362. This Examiner can normally be reached on Mon - Fri 7:30 am - 4:30 pm.

If attempts to reach this Examiner by telephone are unsuccessful, his supervisor, Anil Khatri, can be reached on 703-305-0282. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

MB / *MB*

Wilbert L. Starks, Jr.

Wilbert L. Starks, Jr.
Primary Examiner
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